

R E M A R K S

This is in response to the Office Action that was mailed on October 2, 2003. Claims 14 and 18 are cancelled, without prejudice to their subject matter or to their reassertion in this or a continuing application. Independent claim 20 is amended based upon former claims 14 and 18. No new matter is introduced by this Amendment. With this Amendment, claims 16, 17, and 19-27 are in the application.

THE INVENTION. The present invention provides powder compositions that are suitable for use in foods, cosmetics, pharmaceuticals, and the like. The compositions provided by this invention have excellent flowability owing to their improved (that is, lowered) stickiness. The powder compositions of this invention can contain functional food materials at high concentrations, thereby preventing their deterioration by light, heat, oxygen, or the like. An important aspect of the present invention involves an operation of mixing delipidated egg yolk with water and spray-drying the resulting mixture. The resulting delipidated egg yolk particles are porous. In accordance with this invention, a surprisingly large number of pores, having pore sized from about 0.1 to 10 μm , are formed on the surface of the delipidated egg yolk particles. Another important feature of the present invention comes from drying the mixture of delipidated egg yolk particles and functional food materials under reduced pressure. In contrast to other drying approaches, this provides satisfactory impregnation of the functional food material into the pores at the surfaces of the delipidated egg yolk particles.

Claims 16, 17, 19, and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by Mitsuya as evidenced by Vogel. The rejection is respectfully traversed.

The Mitsuya reference is discussed in the present specification, page 2, line 25 through page 3, line 15. Although Mitsuya discloses mixing a functional food material and fine particles obtained by spray-drying, there is no suggestion in this reference of incorporating such into pores under reduced pressure. In practice in the Mitsuya approach, a substantial amount of the functional food material is adhered to the surface of the particles rather than incorporated into pores. Therefore the Mitsuya particles are sticky. See the discussion on page 3 in the specification.

In contrast, in the present invention, substantial amounts of the functional food material are incorporated into pores of the particles, so that stickiness is reduced ("drying the resulting mixture to a water content of 10 weight-% or less under reduced pressure, thereby providing food-impregnated particles having an average particle size of from 1 to 100 μm "). Accordingly, the particle of the present invention exhibit excellent flowability, owing to their reduced stickiness. See the paragraph bridging pages 3-4 of the specification.

As noted above, the particles of the present invention are distinguished from the particles of the Mitsuya reference, so that the rejection under 35 U.S.C. §102(b) is not reasonable and should be withdrawn.

Claims 14, 18, and 20-26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mitsuya as evidenced by Vogel in view of ancillary references including Likuski. The rejections are respectfully traversed.

The present amendments of the claims clarifies that the present invention is quite different from the animal feed pellets disclosed in Likuski. In

Likuski, edible liquid is absorbed into the pellets. Thus the size of pores in the pellets of Likuski would be very large because those pellets are produced by a process of extrusion. In contrast, in the present invention, a functional food material is incorporated into pores in the fine particle obtained by spray-drying. Accordingly, although Likuski discloses absorption of edible liquid under reduced pressure, it is not obvious that such absorption can be applied to the ***fine*** particles of the present invention ("pores ranging in size from 0.1 to 10 μm ").

Mitsuya discloses mixing a functional food material and fine particles obtained by spray-drying, but provides no suggestion of incorporating such into pores under reduced pressure. In Mitsuya, a substantial amount of the functional food material is adhered to the surface of the particles rather than incorporated into pores and accordingly the Mitsuya particles are sticky.

In contrast, in the present invention, substantial amounts of the functional food material are incorporated into pores of the particles, so that stickiness is reduced. Accordingly, the particle of the present invention exhibit excellent flowability, owing to their reduced stickiness.

No reference discloses or suggests incorporating liquid into pores of ***fine*** particle under reduced pressure, so the present invention is not obvious over the combination of Mitsuya and any of the various ancillary references cited by the Examiner. Clearly, the rejection under 35 U.S.C. §103(a) based on the combination of Mitsuya with the other cited references is not reasonable and should be withdrawn.

Conclusion

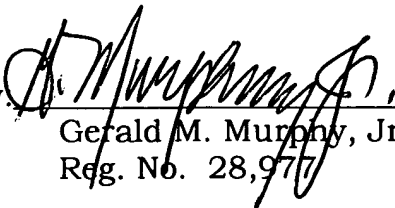
A full and complete response has been made to the outstanding Office Action. Accordingly, the Examiner is respectfully requested to pass the application to Issue.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of one (1) month to February 2, 2004, in which to file a reply to the Office Action. The required fee of \$110.00 is enclosed herewith.

If there are any matters requiring discussion remaining in this application, the Examiner is invited to contact Mr. Richard Gallagher, Registration No. 28,781 at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Gerald M. Murphy, Jr.
Reg. No. 28,977

GMM/RG 

P. O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000